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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/304,298	05/03/1999	AUSTIN D. TAGGART II	TH1118	9493

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EXAMINER

SHIPPEN, MICHAEL L

ART UNIT

PAPER NUMBER

1621

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/304,298

Applicant(s)

TAGGART ET AL.

Examiner

MICHAEL L. SHIPPEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,21,22,125-128 and 156-259 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18,21,22 and 125-128 is/are allowed.
- 6) ☒ Claim(s) 156-259 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 168-259 are rejected under 35 USC 112, first paragraph. The expression "aqueous material" lacks description in the specification as filed.

Claims 156-167 are rejected under 35 USC 112, first and second paragraphs, for reasons of record. Regardless of whether one can characterize the claims as means plus function claims, the argument fails to recognize that the application as filed did not provide for the present claim language. The present claim language by its nature necessarily is of different scope than the specific embodiments pointed to by applicants. Such difference in the scope of the claimed embodiments and those disclosed in the specification are neither disclosed nor enabled in the specification as filed. If the claims are intended to be limited to the specific embodiments in the specification pointed to by applicants, then it is suggested that these embodiments be incorporated into the claims.

Claims 169, 176, 183, 191, 192, 206, 213, 220 and 226-259 are rejected under 35 U.S.C. § 112, first and second paragraphs. There is no basis or description in the specification as filed for "said organic diluent has a first density sufficiently less than a second density of said phenol to attract remainder of said phenolic compounds from said mixture into an organic phase" for reasons of record. The portions of the specification pointed to by applicants are noted; however, the actual language as set forth in the claims is not stated in the specification. While the specification does teach that the density of the organic diluent has an effect on the phase separation, there is

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nothing in the specification that asserts that the density of the diluent has anything to do with the attraction of the phenol thereto as required by the present claim language.

Claim Rejections - 35 USC § 102

Claims 156 and 160-167 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 3,850,996 for reasons of record. The limitation as to organic phase is not required by the instant claims. As to the claims reciting the removal of the salts, substantially all of the salts of neutralization are removed in the production of phenol when the aqueous phase containing these salts is split from the organic phase immediately following the neutralization step. That is, during the standard phenol production process that afford the heavy ends fraction, the salts of neutralization have already been substantially removed when the aqueous phase is separated in the neutralization step.

Claims 156 and 160-167 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 2,715,145 for reasons of record. The limitation as to organic phase is not required by the instant claims. As to the claims reciting the removal of the salts, substantially all of the salts of neutralization are removed in the production of phenol when the aqueous phase containing these salts is split from the organic phase immediately following the neutralization step. That is, during the standard phenol production process that afford the heavy ends fraction, the salts of neutralization have already been substantially removed when the aqueous phase is separated in the neutralization step.

Claims 156-259 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 2,727,074 for reasons of record. As to the addition of an organic diluent required by "some" of the claims, applicants should note this reads on the isopropylbenzene added to the residue, e.g., Example 2. As to the claims reciting the removal of the salts, substantially all of the salts of neutralization are removed in the production of phenol when the aqueous phase containing these salts is split from the organic phase immediately following the neutralization step. That is, during the standard phenol production process that afford the heavy ends fraction, the salts of neutralization have already been substantially removed when the aqueous phase is separated in the neutralization step.

Claims 156 and 160-167 are rejected under 35 U.S.C. 102(e) as being anticipated by USP 5,847,235 in view of USP 5,510,543 for reasons of record. The limitation as to organic phase is not required by the instant claims. As to the claims reciting the removal of the salts, substantially all of the salts of neutralization are removed in the production of phenol when the aqueous phase containing these salts is split from the organic phase immediately following the neutralization step. That is, during the standard phenol production process that afford the heavy ends fraction, the salts of neutralization have already been substantially removed when the aqueous phase is separated in the neutralization step.

Claim Rejections - 35 USC § 103

Claims 156 and 160-167 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 3,850,996 and USP 2,715,145 for reasons of record and reasons given above.

Claims 156-259 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 2,727,074 for reasons of record and reasons given above

Claims 156-167 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5,847,235 in view of USP 5,510,543 for reasons of record and reasons given above

Allowable Subject Matter

Claims 1-8, 21, 22 and 125-128 stand allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael L. Shippen** whose telephone number is **(703) 308-4635**. The Examiner's normal tour of duty is 7:30 AM to 4:00 PM. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 308-1235**. The official group FAX machine number is **(703) 308-4556**.

MShippen
July 14, 2003

A handwritten signature in black ink, appearing to read "Michael L. Shippen", written in a cursive style.

MICHAEL L. SHIPPEN
PRIMARY EXAMINER
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